

The large collection made for the New York Botanical Garden by Mr. R. S. Williams bears similar testimony to these facts; and the present indications seem to be, that when northern Luzon is fully explored, the most numerous cases of specific identity may be as would be expected with Formosa, but the more interesting and instructive cases with the hill district comprising part of southwestern China and northeastern India.

Bornean relationships are not discussed, owing doubtless to the less advanced state of exploration in Mindoro and Paragua than in Luzon and Mindanao, but these should prove equally interesting.

NEW YORK BOTANICAL GARDEN.

COASTAL-PLAIN AMBER

BY EDWARD W. BERRY

Recent discussions of the occurrence of amber in the Cretaceous deposits of the Atlantic coastal plain seem to have overlooked the fact that amber was well known to some of the earlier geological explorers in this region and is frequently mentioned from a number of different localities. Professor John Finch, an Englishman, who visited southern Maryland as well as parts of the intervening region northward as far as Marthas Vineyard during the first quarter of the last century, seems to have been a keen observer and close thinker. On the eve of his departure for England he read a paper before the Philadelphia Academy which was subsequently published in the *American Journal of Science* under the title "Geological Essay on the Tertiary Formations in America."* Aside from the distinction of casting discredit on the term "Alluvial" which had been applied to the coastal plain deposits collectively, his essay contains a number of interesting suggestions such as that relating to the extension under Long Island of the equivalents of the Plastic clays of New Jersey. The present Cretaceous deposits are included in his "Plastic Clay and Sand Formation" which he considered of Tertiary age, one of his reasons for this being the presence of amber which he assumed

* Amer. Jour. Sci. 7: 31-43. 1824.

to be of the same age as that of the Baltic. In speaking of the amber, which was my reason for mentioning Finch's work, he says that the lignites of the Plastic Clay and Sand Formation usually contain it, and among the localities mentioned are Marthas Vineyard, the Delaware River below Bordentown, N. J., Cape Sable, Md., etc. Some of these localities Finch visited, some he reports on the authority of Troost, Vanuxem, and others.

In a recent paper * the writer mentioned amber as constituting one of the characteristics of the laminated lignitic beds which mark the transition to the typically marine deposits of Upper Cretaceous age. These laminated clays and sands constitute what is known as the Magothy Formation, the name having been suggested by the typical exposures at Cape Sable on the Magothy River in Maryland, the classic American amber locality, first described by Troost nearly one hundred years ago (1821) in the third volume of the *American Journal of Science*.

It is not intended to attempt an exhaustive enumeration of the older literature, which has already been done †; it will suffice to point out that scattered through the works of Vanuxem, Morton, and other contemporary writers will be found quite a number of references to the occurrence of amber, most of which seem to have heretofore escaped attention.

In studying these Cretaceous deposits during the past few years the writer has observed amber at a number of points, of which the following may be enumerated. In New Jersey, amber was found at Cliffwood Bluff on Raritan Bay: at the pits of the Cliffwood Brick Company on Whale Creek; in the pits about one-fourth of a mile west of the Long Branch Railroad on Whale Creek, where there is little lignite associated with it; near Morgan on Cheesequake Creek, where the amber is very plentiful and the drops are of considerable size. On the Delaware River amber is disseminated through the Magothy sands in the vicinity of Kinkora, N. J.

In Delaware, the sands along the Chesapeake and Delaware

* Ann. Rep. State Geol. N. J. 1905: 137. 1906.

† Hollick, Amer. Nat. 39: 137-145. 1905.

Canal near High Point contain scattered drops of amber ; and here again it is not in immediate association with lignite, although lignitic layers are near at hand. This locality is believed to be the only one mentioned in this connection which is not new, it having been described in 1830 by Morton, who records lignite and teredo-bored logs and amber beneath sands with marine molluscs, found during the digging of this canal. Farther south, amber occurs in the Cretaceous near Blackmans Bluff on the Neuse River and near Parker Landing on the Tar River, both localities in North Carolina. At nearly all of these localities charred wood seems to be present in more or less abundance, as was noticed by Hollick in connection with the Staten Island deposits. Extensive search in the Raritan Formation of New Jersey during the past summer, while disclosing much lignite and some charred wood, failed to yield any traces of amber, which seems to be so common a feature of the overlying Magothy beds.

MARYLAND GEOLOGICAL SURVEY,
BALTIMORE, MD.

SHORTER NOTES

TWO UNDESCRIBED SPECIES OF COMOCLADIA FROM JAMAICA.—
Comocladia cordata sp. nov. A tree, about 15 m. high, glabrous throughout. Leaves about 2 dm. long ; leaflets about 13, ovate to oblong-lanceolate, firm in texture, dull green, slightly paler beneath than above, strictly sessile, entire-margined, cordate at the base, acute or short-acuminate at the apex, 5–9 cm. long, 2.5–4 cm. wide, the veins diverging from the midvein at nearly right angles and curving upward ; lower leaflets smaller than the upper ones, the pairs distant ; panicles as long as the leaves or shorter, about 8 cm. broad, their branches very slender ; flowers numerous, purple, 1.5 mm. wide ; pedicels filiform, 1–3 mm. long.

Rocky wooded hill, Troy (Britton 640). Nearest to *C. integrifolia* Jacq.

Comocladia velutina sp. nov. A tree, 6 or 7 m. high, the young twigs, foliage and panicles densely brown-velutinous. Leaves about 2 dm. long ; leaflets about 13, oblong, rather firm in texture, paler beneath than above, blunt and rounded at the apex, truncate or subcordate at the base, slightly repand on the